

## REMARKS

This Amendment responds to the Office Action dated April 30, 2004 in which the Examiner rejected claim 1 under 35 U.S.C. § 102(e) and rejected claims 2-14 under 35 U.S.C. § 103.

As indicated above, a typographical error in the abstract has been corrected. Applicant respectfully requests the Examiner approves the correction.

Claim 1 was rejected under 35 U.S.C. § 102(e) as being anticipated by *Fischer* (U.S. Patent No. 6,470,387).

Applicant respectfully traverses the Examiner's rejections of claim 1 under 35 U.S.C. §102(e). The claim has been reviewed in light of the Office Action and for reasons which are set forth below, Applicant respectfully requests the Examiner withdraws the rejection to the claim and allows the claims to issue.

*Fischer* appears to disclose locating networked devices based on user usage of those devices. (col. 1, lines 7-8) Referring now to FIG. 3, a block diagram depicts a database record 205 for providing and enabling cross referencing of use information and device information associated with network 10. (col. 5, lines 24-27) User name 220 includes information sufficient to identify a person (or employee) as the case may be. Location information 225 includes any data sufficient to satisfy the requirement to locate the person identified in the user name field 220, dependent upon the particulars of any given physical environment and/or network environment in which asset locator 12 is utilized. Importantly, however, once asset locator 12 identifies the user location 225 from a respectively matched record 205, the location of the asset being tracked may also be determined. Namely, the location of the user strongly suggests the location of the asset because the asset is typically located

near the user (or users) that use the asset. Thus, referring now to FIG. 4, a block diagram depicts a database record 305 for identifying an asset's physical location. Network asset record 305 includes information fields such as destination device address field 310 and/or peripheral ID field 315 for identifying the particular device on network 10 with which record 305 is associated. Importantly, record 305 further includes one or more user location fields 320, 325, 330, also referred to as "possible device location" fields, for ultimately identifying a probable physical location of the device identified by the record. (col. 5, line 66 through col. 6, line 44) Again, the purpose of user location fields 320, 325, 330 is to enable a determination of a probable location of the device from a collection of possible locations. In other words, given a plurality of known user locations associated with a device record 305, the probable physical location of the device becomes more ascertainable through conventional statistical analysis, plotting techniques, and/or other extrapolation measures. To this regard, in a preferred embodiment, each user location field 320, 325, 330 also includes (or references) an associated "usage" field or parameter 322, 327, 332, respectively, that identifies how many times or what percentage of total times a given user (identified by that user location 320, 325, 330) has referenced the given device. In this context, the probable physical location of the device may be more accurately identified. For example, a collective set of users that use a peripheral device the most are probably located nearest to that device. Additionally, a core engine or information gathering process shown in FIG. 6, which is executed as a background process on computer 15 in a preferred embodiment, provides the basic information gathering and device database building of the present invention. So, referring to FIG. 5, once a query for an asset location is initiated 410, if a network

asset record 305 is already updated 415 in database 14, then the asset's possible physical locations 320, 325, 330 and usage data 322, 327, 332 are referenced 425. Next, the probable location of the asset is calculated 430. This method may be as simple as selecting the possible device location field 320 with the highest usage number 322, or as complicated as statistically calculating and plotting each of the possible device locations and usage numbers to determine a most probable location of the asset. In either case, once the calculation is complete, the asset's probable location is reported 435. In short, the calculated probable location 430, 435 is simply a determination based on user usage of the device because the device is typically located near to or in the general area of the user or users' locations. Asset locator 12 reports the probable asset's location by displaying the location on computer 15, by printing it, by storing it, or by otherwise manipulating the reported data as needed to enable tracking of that device. On the other hand, if upon a query 410 it is determined that an asset is not yet in the network asset database 415 (i.e., a network asset record 305 needs to be created or updated), then that asset's information is captured 420 into a network asset record 305. (col. 6, line 59 through col. 7, line 45) The parameters for determining when sufficient user information is gathered for any given device are denoted simply by system or design choice. For example, a threshold may be set for the number of possible device location fields 320, 325, 330 or usage counts established. Or, a threshold may be set for the number of times the looping process 535, 505 is executed. In any case, once sufficient asset and user information is captured 535, then the network asset record 305 is complete for the given asset (i.e., queried from FIG. 5) and/or for all known assets on network 10 (i.e., in the event of constant background process execution).

Obviously, however, further monitoring, capturing, and/or updating of data for the assets on network 10 will continue to occur as needed with the method of FIG. 6 executing as a background process. (col. 8, lines 40-54)

Thus, *Fischer* merely discloses determining a reference location of the user based on user information and determining a location of a device based on the reference location. Nothing in *Fischer* shows, teaches or suggests compensating distance information based on the number of times each printer receives a printing job as claimed in claim 1.

Also, *Fischer* merely discloses each user location field includes a parameter that identifies how many times a given user has referenced a given device. (col. 7, lines 1-5) Thus, nothing in *Fischer* shows, teaches or suggests a compensating means for compensating the distance information based on the number of times each printer received a printing job from a computer as claimed in claim 1. Rather, *Fischer* merely discloses that each user location field also includes an associated parameter that identifies how many times a given user has referenced the given device.

Additionally, *Fischer* merely discloses that a background process which gathers information. Nothing in *Fischer* shows, teaches or suggests a compensating means for compensating distance information as claimed in claim 1. Rather, the background process merely gathers information.

Finally, *Fischer* merely discloses a user location. Nothing in *Fischer* shows, teaches or suggests storing distance information from a computer to each printer as claimed in claim 1. Rather, *Fischer* merely discloses user information or user location.

Since nothing in *Fischer* shows, teaches or suggests a compensating means for compensating distance information according to a number of times each printer receives a printing job from the computer as claimed in claim 1, Applicant respectfully requests the Examiner withdraws the rejection to claim 1 under 35 U.S.C. § 102(e).

Claims 2 and 3 were rejected under 35 U.S.C. § 103 as being unpatentable over *Fischer* and further in view of *Yacoub* (U.S. Patent No. 6,452,692).

Applicant respectfully traverses the Examiner's rejections of the claims under 35 U.S.C § 103. The claims have been reviewed in light of the Office Action and for reasons which are set forth below, Applicant respectfully requests the Examiner withdraws the rejection to the claims and allows the claims to issue.

As indicated above, since nothing in *Fischer* shows, teaches or suggests the primary features as claimed in claim 1, Applicant respectfully submits that the combination of the secondary reference to *Yacoub* with the primary reference to *Fischer* would not overcome the deficiencies of the primary reference. Therefore, Applicant respectfully requests the Examiner withdraws the rejection to claims 2 and 3 under 35 U.S.C. § 103.

Claims 4-10, 12 and 14 were rejected under 35 U.S.C. § 103 as being unpatentable over *Yacoub* in view of *Fischer*.

Applicant respectfully traverses the Examiner's rejections of the claims under 35 U.S.C § 103. The claims have been reviewed in light of the Office Action and for reasons which are set forth below, Applicant respectfully requests the Examiner withdraws the rejection to the claims and allows the claims to issue.

*Yacoub* appears to disclose a method and apparatus for a networked print server which minimizes the necessity of user interaction in the printing process. (col. 2, lines 26-28) FIG. 4 is a diagram of a typical office suite having four printers and a multitude of user client stations. (col. 8, lines 9-10) In one embodiment, first database 742 stores the capabilities of all the printers running on the network. For example, the four printers shown in the office suite of FIG. 4, color laser printer 410, high-end desktop laser printer 412, color ink jet printer 414 and low-end printer 416, may each be identified by some designator such as P1, P2, P3 and P4, respectively. First database 742 may store a matrix, indexed by the printer designator, of printer capabilities such as dots-per-inch (dpi) resolution, pages-per-minute (ppm) speed and modes (color, black-and-white, etc.). Thus, a matrix of first database 742 storing the capabilities described above for the printers of the office suite shown in FIG. 4 is generated. (col. 14, lines 16-27) A second database 744 is also shown which may contain the geographical mapping of the printers and client stations connected over network 790. Second database 744 will have a table similar to that of Table 1, but storing in coordinate fashion the location of each printer and client station. In operation, a print job along with its preferences is received by communications interface 730 and travels over system bus 750 to either be stored in main memory 710 or in disk 740 to be accessed by software 715. Print server software 715 then sorts the entries of printer capabilities according to the preferences. The sorted entries are stored in list 746, rather than upsetting the order of the database 742 which may already be placed in a high-quality to low-quality order. Also, print server software 715 can query the second database 744 using as a key or index the IDs of the first two/three printers in list 746 to obtain their coordinates. Also, the print job,

identified by some header accompanying the job, indicates which client station the job originated from. The client station ID is used as a key to access the coordinates of that client station. Then the formula  $(X_2 - X_1)_2 + (Y_2 - Y_1)_2$ , where  $(x_1, y_1)$  is the client station and  $(x_2, Y_2)$  is the coordinates of the printer (assuming a single plane), is computed by the print server software accessing CPU 720 to perform its calculations, storing temporary results in a list like list 746, or in main memory 710. Then, print server software 715, depending upon the priority given to printer distance/location from the client station, can re-order list 746 such that the top entry is the closest printer which is also capable of processing the print job according to the preferences. The top most entry is then selected as the "appropriate" printer for the print job. (col. 14, line 54 through col. 15, line 17)

Thus, *Yacoub* merely discloses that based upon priority given to printer location from a client station, a list 746 of printer capabilities is re-ordered. (col. 15, line 11-16) Nothing in *Yacoub* shows, teaches or suggests setting up an order of priority based on usage frequency as claimed in claims 4 and 5 or based on compensated distanced information as claimed in claim 6. Rather, *Yacoub* merely discloses that based upon priority given to printer location, re-ordering a list 746 (column 15, lines 12-14).

Additionally, *Yacoub* merely discloses determining printer distance/location from a client station according to a formula. (col. 15, lines 1-10) Nothing in *Yacoub* shows, teaches or suggests a) compensating distance information based on the number of times each printer received a printing job as claimed in claims 6 and 8 or b) compensating a physical distance from one piece of information equipment to another piece of information equipment based on frequency of information exchange

as claimed in claims 9 and 14. Rather, *Yacoub* merely discloses determining printer distance/location from a client station based upon a formula.

As discussed above, *Fischer* merely discloses determining reference location based on user information and an information gathering process which is executed as a background process. Nothing in *Fischer* shows, teaches or suggests a) setting up an order of priority based on usage frequency as claimed in claims 4, 5, and 6, b) compensating distance information based on the number of times each printer receives a printing job as claimed in claims 6 and 8 or c) compensating a physical distance based on frequency of information exchange as claimed in claims 9 and 14. Rather, *Fischer* merely discloses determining reference location based on user information and an information gathering process which is run as a background process.

The combination of *Yacoub* and *Fischer* would merely suggest determining printer distance/location from a client station using a formula, and depending upon the priority given to the distance, re-ordering a list of printer capabilities as taught by *Yacoub* and to gather information in a background process as taught by *Fischer*. Thus, nothing in the combination of *Yacoub* and *Fischer* show, teach or suggest a) setting up an order of priority based upon usage frequency as claimed in claims 4, 5 and 6, b) compensating distance information based on the number of times each printer receives a printing job as claimed in claims 6 and 8 or c) compensating a physical distance based upon frequency of information exchanged as claimed in claims 9 and 14. Therefore, Applicant respectfully requests the Examiner withdraws the rejection to claims 4-6, 8, 9 and 14 under 35 U.S.C. § 103.



Claims 7, 10 and 12 depend from claims 6 and 9 and recite additional features. Applicant respectfully submits that claims 7, 10 and 12 would not have been obvious within the meaning of 35 U.S.C. § 103 over *Yacoub* and *Fischer* at least for the reasons as set forth above. Therefore, Applicant respectfully requests the Examiner withdraws the rejection to claims 7, 10 and 12 under 35 U.S.C. § 103.

Claim 13 was rejected under 35 U.S.C. § 103 as being unpatentable over *Yacoub* and *Fischer* and further in view of *Yacoub* (U.S. Patent No. 6,552,813). In addition, claim 11 was rejected under 35 U.S.C. § 103 as being unpatentable over *Yacoub* and *Fischer* and further in view of *Dimitri et al.* (U.S. Patent No. 6,351,685).

Applicant respectfully traverses the Examiner's rejections of the claims under 35 U.S.C § 103. The claims have been reviewed in light of the Office Action and for reasons which are set forth below, Applicant respectfully requests the Examiner withdraws the rejection to the claims and allows the claims to issue.

Applicant respectfully submits that since nothing in the combination of the primary references of *Yacoub* and *Fischer* show, teach or suggest the primary features as claimed in claim 9, Applicant respectfully submits that the combination of the primary references with the secondary references to *Yacoub '813* or *Dimitri et al.* would not overcome the deficiencies of the primary references. Therefore, Applicant respectfully requests the Examiner withdraws the rejection to claims 11 and 13 under 35 U.S.C. § 103.

The prior art of record, which is not relied upon, is acknowledged. The references taken singularly or in combination do not anticipate or make obvious the claimed invention.

Thus it now appears that the application is in condition for reconsideration and allowance. Reconsideration and allowance at an early date are respectfully requested.

If for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is requested to contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this case.

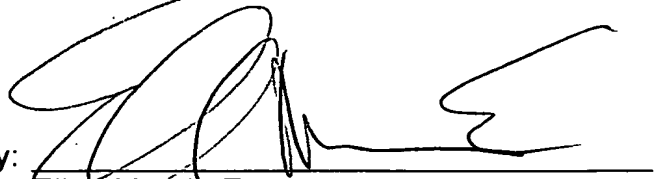
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Respectfully submitted,

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